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### NORTH AMERICAN GRASSHOPPERS OF THE GENUS *ARGIACRIS*, INCLUDING TWO NEW SPECIES FROM IDAHO

(ORTHOPTERA: ACRIDIDAE: CATANTOPINAE)

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ABSTRACT—The genus *Argiacris* comprises four species and one additional subspecies of brachypterous catantopine grasshoppers superficially resembling certain species of *Melanoplus*. They are as follows: *A. rehni* Hebard, southcentral Montana; *A. militaris militaris* (Scudder), *militaris laticerea*, n. subsp., *keithi*, n. sp., and *amissuli*, n. sp., from central Idaho. Except for *amissuli*, the Idaho species all occur above 8,000 feet in habitats of scant vegetation. *A. amissuli* and *rehni* occur at about 5,000 feet elevation, in a zone which includes some sagebrush.

In comprehensive ecological and systematic surveys of Idaho grasshoppers during recent years by Merlyn A. Brusven, Department of Entomology, University of Idaho, Moscow, and Keith Evans, Plant Protection Division, U.S. Department of Agriculture, Twin Falls, Idaho, and their associates, several collections of the poorly known genus *Argiacris* have been made. In August 1969 I was privileged to spend a week with them in a variety of Idaho habitats, and additional collections of the genus were made. Then, in August 1970, Brusven, Evans and Allen C. Scoggan spent several days on a pack trip in the area about 25 miles northwest of Stanley, Idaho, and collected a large number of *A. militaris* at numerous points, so it is now possible to provide a synopsis of the several known species.

*Argiacris* was established by Hebard (1918), and its relationships were discussed briefly by Rehn and Randell (1963) and Gurney and Rentz (1964). The species resemble superficially some brachypterous species of *Melanoplus*, but especially when compared with the type

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species of *Melanoplus*, *M. femurrubrum* (De Geer), *Argiacris* differs in the width of the mesosternal interspace, patterns of epiphallus and aedeagus, and the amount of body pubescence. Several species-groups now assigned to *Melanoplus* do not belong there in a strict sense, but removal must await further revisionary studies.

Material of *Argiacris* is now sufficient to show that two well defined species-groups are represented. One consists of the type species, *A. rehni* Hebard, and *amissuli*, n. sp.; they have short nearly attingent or sometimes overlapping tegmina, moderately robust form, and inhabit rocky gravelly soils likely to support some sagebrush at about 5,000 feet elevation. The other group includes *militaris militaris* (Scudder), *militaris liticerca*, n. subsp., and *keithi*, n. sp.; they have short lateral tegmina, smaller build, and inhabit rocky areas usually with scant vegetation and above 8,000 feet. The latter group is closely related to the genus *Agnostokasia* of Mono Co., Calif., but the general shape of the male cerci suggests that two genera are represented.

I would like to express appreciation to the Idaho entomologists mentioned here and those cited in collecting records for their contribution toward this review of *Argiacris*, also to Kenneth J. Goeden, Oregon Department of Agriculture, Salem, Oreg., who participated in our 1969 collecting trip and contributed numerous chill-dried specimens. My colleague Arthur D. Cushman has assisted with the illustrations.

KEY TO SPECIES OF *Argiacris* BASED CHIEFLY ON MALES

1. Tegmina attingent or nearly so, sometimes overlapping; larger, hind femur 10 mm long or more ..... 2
- Tegmina widely separated, lateral; smaller, hind femur usually not longer than 9 mm ..... 3
2. Tegmen tapering sharply in apical third (fig. 10); aedeagus with ventral valves unspecialized apically (fig. 16). (South-Central Montana) ..... **rehni** Hebard
- Tegmen more broadly rounded in apical third (fig. 9); aedeagus with ventral valves specialized apically (fig. 17). (East-Central Idaho) ..... **amissuli**, n. sp.
3. Arms of furcula very short (fig. 2); pronotum with dark color pattern, blackish on lateral lobes and extending as an indefinite band across pronotal disk (fig. 15); aedeagus as in fig. 20. (Central Idaho, chiefly area of Middle Fork of Salmon River and nearby) ..... **keithi**, n. sp.
- Arms of furcula longer (fig. 3); disk of pronotum without a dark transverse band (fig. 14); aedeagus with dorsal valve very different from above ..... 4
4. Cercus slender (fig. 6); tegmen narrow (fig. 11); specialized lateral piece of aedeagus with sclerotized dark vertical support (fig. 18, *sts*) extending dorsally a short distance beyond portion of main stem (*msa*) which surrounds its base. (Central Idaho, chiefly Sawtooth and Challis National Forests) ..... **militaris militaris** (Scudder)

Cercus wider, usually as in fig. 8; tegmen averaging wider, as in fig. 12 or nearly as broad; lateral piece of aedeagus with sclerotized dark vertical support (fig. 19, *sts*) longer, extending further dorsally beyond surrounding base of main stem (*msa*). (East-Central Idaho, chiefly Lemhi Range) ..... **militaris laticerca**, n. subsp.

**Argiacris rehni** Hebard  
(Figs. 1, 5, 10, 16, 21)

*Argiacris rehni* Hebard, 1918: 167, pl. 8, fig. 18.

The type locality is Livingston, Park County, Montana, elevation 5,000 feet; the holotype male is at the Academy of Natural Sciences, Philadelphia. The original material consisted of 10 specimens collected July 29, 1909, "on the ridge of a slope of a bare hogback showing numerous cherty exposures. The ground there showed rather scant vegetation with tufts of a peculiar woolly plant all about." Later, Hebard (1928:291) recorded additional specimens (17 males, 9 females) collected at Livingston in 1905 and 1906. I have seen more recently collected specimens from Olaf (near Twodot), Wheatland County, and 12.5 miles north of Big Timber, Sweet Grass County, Montana, as noted by Gurney and Rentz (1964).

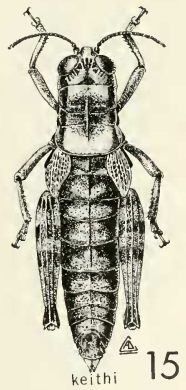
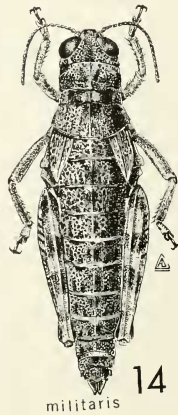
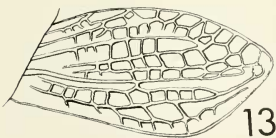
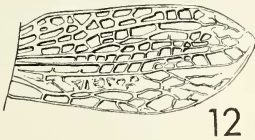
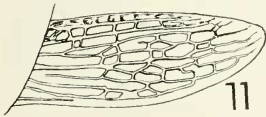
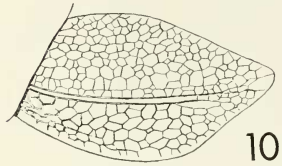
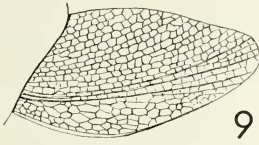
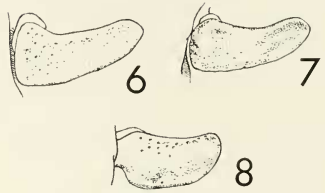
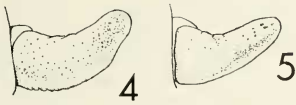
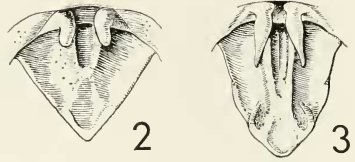
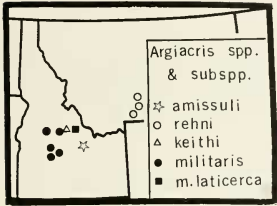
The aedeagus of *rehni* is characterized by an elongate dorsal valve (fig. 16, *dv*) fused apically to a specialized apex of a dark sclerotized mesal portion of the main stem of the aedeagus. The apex of the dorsal valve is prominent as illustrated by Gurney and Rentz (1964, fig. 15) when exposed, but in KOH treatment the less sclerotized extreme apex sometimes is reduced, so that it extends only a short way above the associated apex of the main stem, shown in fig. 16. The arms of the furcula are short, comparable to fig. 2 of *keithi*. Hebard's original habitus illustration is a good representation of general appearance, including attingent tegmina.

**Argiacris amissuli**, n. sp.  
(Figs. 1, 4, 9, 17, 22)

Holotype.—Male. Head in dorsal view with ratio of interocular distance to width of a compound eye 8:14; lateral margins of shallow fastigial sulcation nearly

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Fig. 1, Map showing distribution of *Argiacris* spp. Figs. 2–13, Structures of *Argiacris* spp.: 2, *keithi*, n. sp., furcula and supra-anal plate, holotype; 3, *militaris laticerca*, n. subsp., furcula and supra-anal plate, holotype; 4, *amissuli*, n. sp., left cercus, holotype; 5, *rehni* Hebard, left cercus, near Big Timber; 6, *militaris militaris* (Scudder), left cercus, Twin Peaks; 7, *keithi*, left cercus, holotype; 8, *militaris laticerca*, left holotype; 9, *amissuli*, left tegmen, holotype; 10, *rehni*, left tegmen, near Big Timber; 11, *militaris militaris*, left tegmen, ♂, Twin Peaks; 12, *militaris laticerca*, left tegmen, ♂ paratype; 13, *keithi*, left tegmen, ♂ paratype, Twin Peaks. Fig. 14, *militaris militaris*, general view, ♀, Twin Peaks. Fig. 15, *keithi*, general view, ♀ paratype, Twin Peaks. (Figs. 2–15 by Arthur D. Cushman)



parallel, more so than in *rehni* males; frontal costa with trace of sulcation, not narrowed; antennal flagellum with 21 articles.

Median carina of pronotum indistinct but evident on prozona, distinct on metazona, cut by 3 sulci; posterior margin enclosing about 130° of angulation, the point bluntly rounded; tegmina extending to posterior margin of tergum 2, overlapping slightly; individual tegmen as in fig. 9; hind wing rudimentary; legs as in *rehni*, hind tibial spines 11 mesal, 9 and 10 external.

Supra-anal plate a little narrower than in *keithi* (fig. 2), arms of furcula of similar length but directed straight posteriorly instead of curving laterally; cercus (fig. 4) with ventral margin thin, flangelike; subgenital plate bluntly conelike at apex.

Concealed genitalia (KOH preparation in glycerine contained in microvial) with aedeagus (figs. 17, 22) very distinct from *rehni*; ventral valves erect, twisted near apex to display earlike apical lobes posteriorly; dorsal valves closely appressed apically to ventral valves, more heavily sclerotized; specialized lateral piece (*slp*) of main stem a membranous flangelike strip attached mesally to dorsal valves; epiphallus almost like *rehni*, but lophi in anterior view show more constriction of mesal margins than *rehni*.

Coloration: General ground color grayish brown; eyes, metazona of pronotum, and tegmina brown; head and prozona light gray; front and middle legs and antennae tinged with orange white; abdomen same, with some dark dorsal blotches; hind femora with 2 dark transverse bars, also at base and apex, ventral surface livid red; hind tibiae pale orange white, tinged mesally with pinkish.

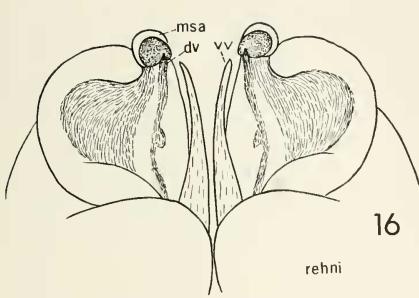
Measurements (in millimeters): Length of body, 18.0; pronotum, 5.3; hind femur, 10.4; front femur, 3.8; greatest width of pronotum, 4.5; hind femur, 3.1; front femur, 1.1.

Specimens examined: Holotype. IDAHO: 13.2 mi. n.w. Howe, Butte County, on [along] Little Lost River, about 5,000 ft., [among] dry, sparse sage, Aug. 18, 1965 (Gary Forsyth) (U.S. National Museum, Type no. 71048).

Keith Evans, who has been associated with the collector, reports that repeated attempts to collect specimens additional to the unique type have been unsuccessful. The name *amissuli* is from the Latin meaning "of something small which is lost," in allusion to the Little Lost River.

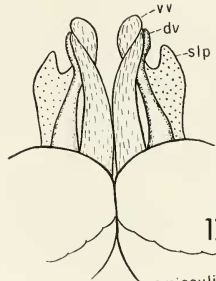
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Figs. 16–25, Aedeagi of *Argiacris* spp.: 16, *rehni* Hebard, dorso-posterior view, near Big Timber; 17, *amissuli*, n. sp., dorso-posterior view, holotype; 18, *militaris militaris* (Scudder), dorso-posterior view, Imogene Pass; 19, *militaris laticerca*, n. subsp., dorso-posterior view, paratype; 20, *keithi*, n. sp., dorso-posterior view, paratype, Twin Peaks; 21, *rehni*, lateral view, anterior surface to left, near Big Timber; 22, *amissuli*, lateral view, anterior surface to left, holotype; 23, *militaris militaris*, lateral view, anterior surface to left, Imogene Pass; 24, *militaris laticerca*, lateral view, anterior surface to left, paratype; 25, *keithi*, lateral view, anterior surface to left, paratype, Twin Peaks. Abbreviations: ca, curved appendage at apex of dorsal valve; dv, dorsal valve of aedeagus; msa, main stem of aedeagus; slp, specialized lateral piece of main stem; vs, sclerotized vertical support of specialized lateral piece; vv, ventral valve of aedeagus.



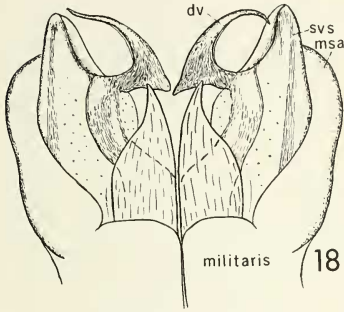
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rehni



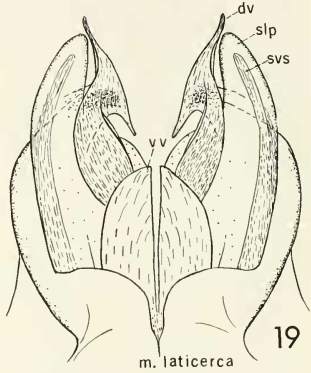
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amissuli



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militaris



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m. laticerca



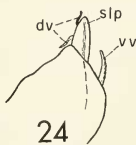
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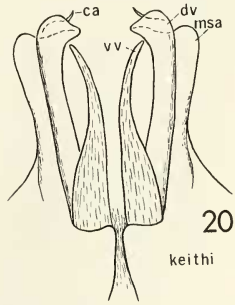
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20

keithi

*Argiaeris keithi*, n. sp.  
(Figs. 1, 7, 13, 15, 20, 25)

Holotype.—Male. Head in dorsal view with interocular distance in comparison to width of a compound eye as 5:14; fastigium shallowly sulcate; frontal costa almost flat, not narrowed at median ocellus or union with fastigium; compound eyes more bulging than as shown in fig. 15 for female; antennae filiform, flagellum of 22 articles.

Median carina of pronotum on pronotum evanescent but evident, distinct on metazona, cut by principal sulcus only; posterior margin of pronotum a little more rounded than figured for female; tegmen as in fig. 13; hind wing rudimentary; front and middle femora more robust than in female; apex of hind femur even in length with apex of abdomen.

Supra-anal plate (fig. 2) slightly acute at apex; furcula present as short arms with rounded apices; cercus (fig. 7) with broad shallow sulcation of exterior surface; subgenital plate bluntly, inconspicuously conelike dorsally at apex.

Concealed genitalia (KOH preparation in glycerine contained in microvial) with distinctive aedeagus (figs. 20, 25); ventral valves (*vv*) slender, curving broadly laterally and anteriorly in apical halves; principal appendage of each half consisting of weakly sclerotized portion of main stem of aedeagus (*msa*) fused to dorsal valve (*dv*); latter well sclerotized, specialized at apex with slender curved appendage (*ca*) dorso-anteriorly; epiphallus with slender ancorae; lophi erect, broadly rounded apically.

Coloration: Dorsal portion of occiput anteriorly to narrow point between eyes solidly blackish; fastigium dirty gray; remainder of head pale yellowish mottled with varying shades of gray; eyes orange-brown; pronotum orange-brown, grayish on ventral part of lateral lobes, dorsal two-thirds blackish, shiny on lobes of prozona, dull dark brown across disk dorsally; tegmen brown, veins yellowish, most noticeably so in anal area; dorsum of abdomen blackish, marked with pale gray as in fig. 15; supra-anal plate grayish brown, margins pale; ventral surfaces mainly pale yellowish; hind femur pale yellow with 2 dark transverse bands visible dorsally and laterally; basal and knee areas dark brown, some pinkish mesally and ventrally; hind tibiae pinkish-red; other legs pale orange; surface of body with conspicuous light gray pubescence, especially on pronotum and dorsum of abdomen.

Measurements (in millimeters): Length of body, 17.0; pronotum, 4.2; hind femur, 8.7; front femur, 3.2; greatest width of pronotum, (including lateral lobes viewed from above), 3.3; hind femur, 2.3; front femur, 1.0.

Allotype.—Female. General appearance (fig. 15) larger and more robust than male. Ratio of interocular distance to width of an eye as 8:14; cercus bluntly triangular; "scoop" of dorsal valve of ovipositor shallowly concave.

Coloration: Differing from male in smaller blackish area on occiput and grayish instead of orange-brown general color of pronotum.

Measurements: Length of body, 24.0; pronotum, 4.9; hind femur, 10.1; front femur, 3.3; greatest width of pronotum, 4.9; hind femur, 2.7; front femur, 0.8.

Variation: Paratypes agree essentially with the holotype and allotype. Dark markings on the dorsum of the head vary between the approximate extremes described for type and allotype; variation is not

correlated with sex. The blackish transverse mark on the pronotal disk and the pale dorsal areas of the abdomen vary in intensity, probably due in large part to post-mortem changes. Eight male and 6 female paratypes have measurements as follows: Length of body of males, 14.6–17.0, average, 15.9; of females, 19.0–22.5, average, 20.9; of pronotum of males, 3.4–4.2, average, 3.8; of females, 4.2–4.9, average, 4.4; of hind femur of males, 8.0–9.1, average, 8.5; of females, 9.0–9.7, average, 9.4.

Specimens examined: 31 males, 20 females. IDAHO: Flume Creek Point, 7 mi. s.w. Meyer's Cove, Lemhi Co., 9,200 ft., Sept. 2, 1967 (Brusven), 2 males; Sleeping Deer Mtn., about 4 mi. s. Woodtick Divide, about 16 mi. s.w. Meyer's Cove, 8,400–9,500 ft., Sept. 9, 1968 (Brusven), 1 male, 2 females; Twin Peaks, 14 mi. n.w. Challis, Custer Co., about 10,000 ft., Aug. 26, 1969 (Brusven, Goeden, Scoggan), 28 males, 18 females (includes holotype and allotype).

The type and allotype and a portion of the 30 male and 19 female paratypes are deposited in the U.S. National Museum (No. 70906); other paratypes are deposited at the University of Idaho, California Academy of Sciences, the Twin Falls Laboratory, U.S. Department of Agriculture, Twin Falls, Idaho, and Oregon Department of Agriculture, Salem, Oregon.

The habitat at Twin Peaks extended from just a few hundred feet below and south of the Lookout building at the summit near the road along a ridge running mainly southward. Specimens were found chiefly on barren rocky gravelly ridges and talus slopes showing very little soil development; vegetation consisted of clumps of fescue grass and forbs, along with occasional conifers.

The 3 localities at which *keithi* has been collected are within about 20 air miles from each other in a rugged mountainous section near the Idaho Primitive Area.

The species is named as a tribute to Mr. Keith E. Evans in recognition of his energetic and dedicated efforts, over a period of many years, to assemble comprehensive series of Idaho grasshoppers.

***Argiacris militaris militaris* (Scudder)**

(Figs. 1, 6, 11, 14, 18, 23)

*Melanoplus militaris* Scudder, 1897a: 9, 33; 1897b: 126, 224, pl. 15, fig. 3.

Scudder gave the original material and type locality as "One male, 1 female. Soldier, Logan County, Idaho (L. Bruner)." The male lectotype, designated by Rehn and Hebard (1912:82), was originally in the Bruner Collection, is now at the Academy of Natural Sciences, Philadelphia. Today Soldier is a very small place, not on many maps, which is just north of Fairfield, Camas County. Currently, no Idaho



county is named Logan. In an atlas dated 1900, the vicinity of Soldier was Elmore County, and an 1888-89 atlas called it Alturas County; it may have been called Logan County at some other time.

The probable source of the type is the high mountains near the present Soldier Mountain skiing area or northeast of there in the Camas Prairie section. Bruner (1890) visited Soldier and mentioned particularly "Camas Prairie of Logan County, Idaho." He revisited the area in 1891 (Bruner, 1891) and reported that he "found specimens of at least three species that I believe are new hoppers. These were all taken at about 9,000 feet elevation." Then or soon afterward, Scudder was working on his time-consuming Revision of the Melanopli, which apparently was completed by December 1895, so it is logical to believe the Bruner specimens were loaned to Scudder soon after their capture.

I have examined the following material, none of which has been recorded previously except the type and that from Galena Summit. IDAHO: Twin Peaks, 14 mi. n.w. Challis, Custer Co., about 8,500 ft., Aug. 26, 1969 (Gurney), 3 males, 2 females; 16 mi. n.w. Challis, Custer Co., July 29, 1963 (O. O. Fillmore), 2 males, 1 female; 1 to 3 mi. e. Soldier Lookout, 8,400-8,800 ft., Aug. 25, 1970, 27 males, 9 females; 2 mi. w. Cutthroat Lake, 9,000 ft., Aug. 24, 1970, 5 males, 4 females; 1½ mi. s. Cutthroat Lake, 8,500 ft., Aug. 24, 1970, 17 males, 10 females; Soldier Lake Pass, 1 mi. w. Soldier Lakes, 8,400 ft., Aug. 24, 1970, 18 males, 7 females; Upper Helldiver Lake, 8,200 ft., Aug. 23, 1970, 13 males, 9 females; 1 mi. n. Roughneck Lookout, 8,600 ft., Aug. 23, 1970, 16 males, 9 females; Roughneck Peak, 9,100 ft., Aug. 27, 1970, 9 males, 8 females; Edith Lake, 10 mi. s.w. Obsidian, 8,600 ft., Aug. 10, 1966 (Brusven & Evans) 2 males, 1 female; Imogene Pass, 10 mi. s.w. Obsidian, about 8,500 ft., Aug. 9, 1966 (Brusven & Evans) 1 male, 1 female; Edith Lake, 10 mi. s.w. Obsidian, 8,600 ft., Aug. 10, 1966 (Brusven & Evans) 2 males, 1 female; Imogene Pass, 10 mi. s.w. Obsidian, about 8,500 ft., Aug. 9, 1966 (Brusven & Evans) 1 male, 1 female; Galena Summit, Sawtooth Range, 8,750-9,225 ft., Aug. 17, 1928), (Rehn & Hebard) 2 males, 1 female; Bald Mtn., 6 mi. w. Ketchum, Blaine Co., 9,230 ft., Aug. 27, 1969 (Brusven, Evans, Goeden, Gurney, Scoggan) 15 males, 4 females; "Soldier, Logan County, Idaho. L. Bruner," 1 male (lectotype).

The 7 localities from Soldier Lookout to Roughneck Peak are in the Challis National Forest, Custer County, and average about 25 miles northwest of Stanley. Collections at these localities were made by Brusven, Evans, and Scoggan. Edith Lake and Imogene Pass are adjacent to the Sawtooth Primitive Area, about 8 miles directly south of the southern end of Redfish Lake. Obsidian is about 1½ miles east of Highway 93, about 18 miles southeast of Stanley.

Only a little variation in shape of cercus (fig. 6) has been noted.

The apical third of tegmen in a few specimens is not narrowed as noticeably as in fig. 11, which is the usual shape. The dorsal lobe of the dorsal valve usually is recurved as shown in the right side of fig. 18, but sometimes extends dorso-laterally as shown at the left of the same figure. The Imogene Pass specimen illustrated in fig. 18 is asymmetrical, as drawn.

At Twin Peaks most of the specimens were found on boulders of a talus slope with only scattered vegetation present, in a place about 2 miles from the *keithi* site and at least 1,000 feet lower. At Bald Mountain they occurred in a nearly level area on the coarse stony ground surface at the summit.

***Argiacris militaris laticeera*, n. subsp.**

(Figs. 1, 3, 8, 12, 19, 24)

Holotype.—Male. Externally agreeing with *keithi* and *militaris militaris* in most characters except as mentioned in key: Head in dorsal view with interocular distance in relation to width of a compound eye as 5:11; flagellum of antenna with 20 articles.

Median carina of pronotum on prozona evident only on anterior half; tegmen a little more slender than drawn from paratype (fig. 12), ratio of maximum width to length 11:26.

Supra-anal plate (fig. 3) without distinct lateral specialization; furcula extending about one-third length of plate; cercus as in Fig. 8.

Concealed genitalia (KOH preparation in glycerine) with ventral valves (*vv*) prominent, broadly tapered apically, with striated surface structure conspicuous; specialized lateral piece of aedeagus (fig. 19, *slp*) on each side extending dorsally more than in *militaris militaris*, the vertical supporting rod (*svs*) prominent; each dorsal valve with specialized apical portion borne mesoanteriorly, the area of attachment heavily sclerotized and dark, the basal lobe short, somewhat twisted and with a broad face directed anteriorly, the dorsal lobe long and very slender; epiphallus similar to that of *keithi*, an individual lophus seen dorsally more elongate than in *keithi*.

Coloration: Whole dorsum of head blackish generally, with some small gray streaks, remainder of head whitish gray; eyes orange-brown; ventral third of lateral lobes of pronotum dirty gray, remainder of pronotum black, duller and with very few gray streaks on disk; tegmen brown, a little paler in anal area; dorsum of abdomen blackish, spotted with pale chiefly toward apex; supra-anal plate yellow-gray, furcula very pale orange; ventral surface and legs as in *keithi*.

Measurements (in millimeters): Length of body, 16.0; pronotum, 3.7; hind femur, 8.8; front femur, 2.9; greatest width of pronotum, 3.3; hind femur, 2.3; front femur, 1.0.

Allotype.—Female. General appearance much as shown in fig. 14 for *militaris militaris*, but tegmina broadly rounded apically. Ratio of interocular distance to width of an eye from above 8:13; cercus very broadly triangular; apex of dorsal valve of ovipositor more sharply upturned posterior to "scoop" than in allotype of *keithi*.

Coloration: General color a speckled brownish-gray, the pattern essentially as

illustrated for typical *militaris*; pronotum dull, black area on lateral lobes not sharply defined; tegmina reddish brown.

Measurements: Length of body, 20.5; pronotum, 4.5; hind femur, 9.5; front femur, 2.6; greatest width of pronotum, 4.5; hind femur, 2.6; front femur, 0.7.

Variation: The cerci of about half of the 19 male paratypes are not quite so broad proportionally as in fig. 8, though broader than in typical *militaris* (fig. 6). Tegmina of several paratypes of both sexes are intermediate between figs. 6 and 8. Several paratypes are reddish brown in general color instead of blackish gray as in the majority of specimens. Reddish hind tibiae and dark banding of hind femora are uniform. Nine male and 5 female paratypes have measurements as follows: Length of body of males, 15.0–17.0, average, 16.1; of females, 21.0–24.5, average, 22.7; of pronotum of males, 3.5–3.7, average, 3.6; of females, 4.4–4.7, average, 4.5; of hind femur of males, 8.2–9.4, average, 8.7; of females, 10.0–10.5, average, 10.1. Body length of males is very variable, depending on the degree of curvature anterior of the posterior segments, so it is hardly a dependable indication of size.

Specimens examined: 20 males, 12 females. IDAHO: Meadow Lake, 6 mi. (by road) s.w. Gilmore, Lemhi Co., 9,000 ft., Aug. 24, 1969 (Brusven, Goeden, Gurney, Scoggan), 16 males, 5 females (including type and allotype); same, July 27, 1961 (W. F. Barr), 2 males, 1 female; Aug. 30, 1962 (G. B. Hewitt) 1 female; same, (W. F. Barr), 1 female; Aug. 17, 1966 (Brusven, F. Nonini) 2 males, 4 females.

The holotype, allotype, and a portion of the 19 male and 11 female paratypes are deposited in the U.S. National Museum (No. 70907); other paratypes are at the University of Idaho, California Academy of Sciences, and Oregon Department of Agriculture, Salem, Oregon.

The only locality at which *militaris laticerca* has been collected is a rocky talus slope, west exposure, at about 9,000 feet altitude, some 300 yards north of Meadow Lake, near a park and picnic area, which in turn is 6 miles s.w. from the deserted old mining town of Gilmore. The habitat is sparsely vegetated with fescue grasses, sedges and scattered forbs.

Because of variation in comparative width of tegmina and of male cerci, some specimens are not readily distinguished from typical *militaris* by those characters. It has been possible to distinguish all males by the aedeagus, but there is some variation. Also, there is such a close similarity of aedeagus in the 2 entities, in contrast to quite different aedeagal details of *militaris militaris* and *keithi*, that it is unlikely that *laticerca* is more than a subspecies of *militaris*. Although the population of *laticerca* may be isolated, it probably is in the process of evolving from *militaris*-like stock, and regarding it as a subspecies is the best interpretation of its relationship. The name *laticerca* refers to the wide cercus.

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**A NEW SPECIES IN THE GENUS *URSIA* BARNES & McDUNNOUGH**  
(LEPIDOPTERA: NOTODONTIDAE)

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ABSTRACT—The adult male of *Ursia furtiva*, n. sp., is described from the Big Bend area of Texas.

***Ursia furtiva*, n. sp.**

Male.—Head hirsute, clothed with mixture of long, narrow, blackish and whitish scales. Antennae bipectinate, of about 45 segments; pectinations extending almost to apex of shaft; each pectination with two rows of numerous setae. Eyes round, diameter about 0.75 mm. Front wedgeshaped, 0.40 mm wide below, 0.90 mm wide at top. Palps filiform, porrect, minute, shaggy.

Thorax hirsute all over, gray above and beneath. Scales of the collar back row black.

Legs with long, narrow, loose, grayish scales on top side of all three tibiae. Tarsi smoothly scaled, black, narrowly white distally.

Abdomen: no notes made before dissection.

Wings above: pattern of maculation clearly shown by fig. 1. The color varies in saturation but not in hue from white to brownish black, except narrowly around discal bar at end of cell, where it tends to become a little yellowish.